

Notice of Allowability	Application No.	Applicant(s)	
	10/022,788	BYERS, SIMON D.	
	Examiner	Art Unit	
	Susan F. Rayyan	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/12/04.
2. ☒ The allowed claim(s) is/are claim 11, now renumbered as independent claim 1.
3. ☒ The drawings filed on 19 April 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Reasons For Allowance

The following is an examiner's statement of reasons for allowance:

The present invention is directed to (put claim here) a machine readable medium containing configuration instructions for performing method for retrieving data accessible by posing a plurality of queries over a network to at least one target server, wherein the plurality of queries are posed through a restricted interface that returns the k data points closest to a query point, and the method comprising the steps of: selecting a plurality of proxy server services, transmitting a first one of the plurality of queries to a first one of the plurality of proxy sever services for transmission to one of the at least one target servers, transmitting a second one of the plurality of queries to a second one of the plurality of proxy server services for transmission to one of the at least one target servers, for each one of the plurality of queries, receiving from its corresponding proxy server service a reply from its corresponding target server, calculating a maximum radius from a previous query point to a data point returned by the corresponding query, determining a region with R covered by the previous query based on the corresponding maximum radius, computing quadtrees of progressively greater levels until a computed quadtree has an uncovered node entirely outside the covered region and constructing a subsequent query to contain a query point that is a center of the uncovered quadtree node.

The closest prior art of record, Nalika (US 2002/0069241) teaches a machine readable medium containing configuration instructions for performing method for retrieving data accessible by posing a plurality of queries over a network to at least one

target server, wherein the plurality of queries are posed through a restricted interface that returns the k data points closest to a query point, and the method comprising the steps of: selecting a plurality of proxy server services, transmitting a first one of the plurality of queries to a first one of the plurality of proxy sever services for transmission to one of the at least one target servers, transmitting a second one of the plurality of queries to a second one of the plurality of proxy server services for transmission to one of the at least one target servers, for each one of the plurality of queries, receiving from its corresponding proxy server service a reply from its corresponding target server.

However Nalika fails to anticipate or render obvious the recited feature of calculating a maximum radius from a previous query point to a data point returned by the corresponding query, determining a region with R covered by the previous query based on the corresponding maximum radius, computing quadrees of progressively greater levels until a computed quadtree has an uncovered node entirely outside the covered region and constructing a subsequent query to contain a query point that is a center of the uncovered quadtree node of independent claim 11.

Chang (US 2002/0052674) teaches a searching task does a search within an area and then in another area. The user receives updated information related to an overlapped area (parg. 64).

Clementini, E. et al. ("Modeling Topological Spatial Relations: Strategies for Query Processing", Computer and Graphics, 18 (v6): 815-822, 1994) teaches processing of spatial queries within topological constraints.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Rayyan whose telephone number is (571) 272-4117. The examiner can normally be reached M-F: 8am - 4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for Official communications, (703) 746-7238 for After Final communications and (703) 746-7240 for Status inquiries and draft communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Susan Rayyan



February 3, 2005



Primary Examiner